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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,396	11/02/2006	Ping Li	021238-832	1054
21839	7590	10/05/2010		
BUCHANAN, INGERSOLL & ROONEY PC			EXAMINER	
POST OFFICE BOX 1404			NGUYEN, PHU HOANG	
ALEXANDRIA, VA 22313-1404				
			ART UNIT	PAPER NUMBER
			1791	
			NOTIFICATION DATE	DELIVERY MODE
			10/05/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com  
offserv@bipc.com

### Office Action Summary

**Application No.**

10/560,396

**Applicant(s)**

LI ET AL.

**Examiner**

PHU H. NGUYEN

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 10, 17, 21, 31, 32, 35, 37, 39, 40, 47, 53, 62-64, 73, 74 and 79-81 is/are pending in the application.
- 4a) Of the above claim(s) 31, 32, 35, 37, 39, 40, 47, 53, 62-64, 73, 74 and 79-81 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 10, 17 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-944)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/19/2010 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Snaidr et al. (U.S. Pub. No. 20020062834).

Regarding claim 1, Snaidr discloses a smoking article comprising:

a tobacco rod (54, fig. 6) having a wrapper (10, fig. 6) formed around the tobacco rod, the wrapper including a patterned (18, fig. 6) deposit on at least a portion of one surface of the wrapper,

wherein the pattern deposit comprises catalyst particles of catalyzing, oxidizing and/or reducing the conversion of a constituent gas component in the mainstream and/or sidestream smoke of the smoking article (abstract and paragraph 57), and

wherein the gradients of zeolites can be custom designed and lead to layers of the zeolite composition where the suitable catalyst is dispersed throughout these layers; since the layers have a gradient of adsorption it inherently creates a concentration gradient of the catalyst between a first portion having a low concentration feature and a second portion having a higher concentration feature (paragraph 52).

Regarding claim 2, Snaird discloses the smoking article wherein the constituent gas component is carbon monoxide and/or nitric oxide (paragraph 82).

Regarding claim 17, Snaird discloses the smoking article wherein the wrapper is a first wrapper and the smoking article further comprises a second wrapper (paragraph 26).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snaird et al. (U.S. Pub. No. 20020062834) in view of Smith (U.S. Patent No. 3636027). Snaird does not disclose the oxide catalyst is supported. Smith discloses a catalyst system can be self supported or deposited on a support or carrier for dispersing the catalyst system to increase its effective surface. Calcium carbonate is one of the useful compound as carrier (column 7, lines 49-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to support the catalyst

on a compound such as calcium carbonate to increase its effective surface as taught by Smith.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snaird et al. (U.S. Pub. No. 20020062834). Snaird discloses loading catalyst to the wrapper from one end to the other end (see fig. 1) but does not expressly disclose separate loading of catalyst on the wrapper, it would have been obvious to one of ordinary skill in the art at the time the invention was made to load the catalyst on one end of the wrapper and then load the catalyst on the other end of the wrapper because selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results. See also *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946).

### ***Response to Arguments***

Applicant's arguments filed 8/19/2010 have been fully considered but they are not persuasive.

Applicant essentially argues that Snaird fails to disclose a patterned deposit including a concentration gradient of the catalyst between a first portion having a low concentration feature and a second portion having a high concentration feature. However, as discussed above for claim 1, Snaird discloses that it can be custom designed with gradients wherein the catalyst can be dispersed corresponding to the claimed invention (paragraph 52 of Snaird).

Applicant further argues that the dependent claims are patentable because Snaird fails to meet the features of the independent claim 1 and secondary references

fails to remedy. However, as explained above the reference of Snaird meets the claimed features of the invention. Therefore, the dependent claims stand rejected as discussed above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHU H. NGUYEN whose telephone number is (571)272-5931. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip Tucker can be reached on 571-272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N 9/23/2010

***/Philip C Tucker/  
Supervisory Patent Examiner, Art Unit 1791***